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ABSTRACT

This is a summary report on the development and implementation of the Child Development Associate Consortium's Credential Award System (CAS). The CAS has as its purpose the assessment of the performance of child care workers and the granting of Child Development Associate (CDA) credentials to those who demonstrate competence in caring for children. During the development stage of the CAS two field studies were conducted: (1) the 1974 field study, which was intended to test the feasibility of assessing candidates using the Consortium's assessment model, to plan research and coordinate assessment with the credentialing system, and to conduct formulative research on the prototype assessment system; and (2) the 1975 field study, which provided information about how well the revised assessment process worked in the field. Following these studies a decision was made to implement the CAS, and a third study was conducted to evaluate the first year of implementation (1975-76). The evaluation study and both field studies are described in detail in this report. Included also is information about the development of the CDA consortium and the six steps in the credential award system. (MS)

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REPORT ON THE CHILD DEVELOPMENT ASSOCIATE CONSORTIUM'S AWARD SYSTEM:

DEVELOPMENT AND FIRST YEAR EVALUATION

EXECUTIVE SUMMARY

September 1976

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FOREWARD

This is a summary report on the development and implementation of the Child Development Associate Consortium's Credential Award System. It has been developed for the September 1976 CDA membership meeting. Contents of this report have been taken from a more comprehensive organizational development report which is currently in press.

Information about the development of the CDA award system and the evaluation of the first year of operation are included in the report. Evaluation data were gathered by an independent market research firm. Interviewing was conducted between July 26 and August 2, 1976, via centrally located telephone WATS lines under the direct supervision of the research firm's personnel. A total of 201 interviews were completed—51 with CDA representatives and 50 with each of the remaining roles on the LAT; (credentialed) candidates, trainers, and parent-community representatives.

The questionnaire produced over 220 variables for each category of team member. Data were subjected to descriptive and inferential statistical analyses. A variety of treatments, including multivariete analysis, were performed to help describe the LAT members' response. In addition, validity of the Award system was investigated, using factor analysis.

Highlights from the early development of the consortium are included in the first section, followed by the 1974 and 1975 Field Study results. The last section provides selected information about the four objectives which were used to evaluate the first year's operation.

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EXECUTIVE SUMMARY

INTRODUCTION

CAS Purpose

This is a summary report about the development and implementation of the Child Development Associate (CDA) Consortium's Credential Award System (CAS). The CAS is the means by which the Consortium carries out its basic purpose: to assess the performance of child-care workers and to grant credentials to those who demonstrate competence.

THE CDA CONSORTIUM

Half-Million Members

The Child Development Associate Consortium is a private, nonprofit corporation composed of 39 national groups and two public members, the total representing a membership of more than half a million persons who are directly concerned with the education and development of young children.

A CHILD DEVELOPMENT ASSOCIATE

CDA Defined

A Child Development Associate (CDA) is a person who has earned a new kind of credential in early childhood education/child development. The CDA credential signifies that its holder has been assessed and found to be competent in helping children learn and develop. Having the CDA credential means that a person is recognized nationally for his or her competence in caring for children; this recognition is given by the early childhood education/child development profession as this is represented in the CDA Consortium.

CDA CONSORTIUM'S CREDENTIAL AWARD SYSTEM

The Consortium processes applicants for the CDA credential by means of the Credential Award System (CAS). The CAS provides for all necessary contacts, communications, evaluations and activities required of a person seeking the CDA credential.

CDA's Award System's Six Phases

The CAS has six phases:

1. Pre-Entry Process;
2. Intake and Initial Assessment Activity;
3. Candidate Readiness;
4. Team Assessment;
5. Award;
6. Post Award Activity.

The Credential Award System provides a candiate for the Child Development Associate credential with an individualized, self-paced, performance-based assessment of his or her competence in caring for young children. The assessment is conducted by a team of persons, known as the Local Assessment Team (LAT).

CHILD DEVELOPMENT ASSOCIATE CONSORTIUM DEVELOPMENT

The period from June 22, 1972, to March 27, 1975, was one of intense activity, growth, and development for the Child Development Associate Consortium, as the record shows. In 31 months, the Consortium progressed through incorporation as an organization to an operational credentialing agency. This was accomplished primarily through the development of the Credential Award System. In this period the:

Thirty-one months of development

- Board of Directors met eighteen times and established the organization and set consortium policy;

Roles of groups

- Consortium Staff developed and implemented the Credential Award System;

- Consortium sponsored eleven task forces and colloquy groups which met 18 times and provided direction, guidance, information about the CDAC's CDA system.

Roles of groups

- Consortium subcontracted work to 44 groups for the development and refinement of competency statements, assessment instrumentation and credentialing procedures.

- Consortium conducted two field studies of the assessment system and as a result in March 1975 decided to implement the CDAC Credential Award System

SIX PHASES OF THE CREDENTIAL AWARD SYSTEM

There are six phases of the Credential Award System which are used to determine candidate competency. Six competencies and 13 functional areas are used in the system. A description of the phases, related competencies and functional areas, along with other information about the system, appears in Appendix A.

Phases, competencies, and functional areas

FIELD STUDY 1974

INTRODUCTION

The Spring 1974 field test was conducted to evaluate the Child Development Associate Consortium Assessment model in actual field conditions.

OBJECTIVES OF THE 1974 FIELD TEST

Study of model on national basis

The Spring 1974 field test of the Child Development Associate Consortium prototype assessment system was conducted between March 1 and June 30, 1974. The Consortium wanted to study the model on a national basis and determine its acceptance in the field. There were three objectives of the field test:

- To test the feasibility of assessing candidates using the Consortium's Assessment Model.
- To plan research and coordinate assessment with the credentialing system.
- To conduct formulative research on the prototype assessment system.

SAMPLE

Sampled training programs

CDA pilot training, Head Start Supplementary Training, day care training, and other programs which provide workers in early childhood were among the programs from which a sample was drawn. Two hundred forty-two candidates were contacted and asked to participate. A total of 188 agreed and 169 completed the assessment.

HIGHLIGHTS OF THE FINDINGS

Results of the field test for highlight presentation have been grouped into three categories: general findings, LAT meetings and members roles, and the portfolio.

General Findings

System Implementation

An objective of the field test was to determine the feasibility of implementing the assessment system. It was determined that the system could be implemented. Other findings were:

- Role of Consortium Representative: Candidates were assigned at random to representatives whose roles were Active or Limited. The role had apparently little impact on the decision, or on candidate drop-out rate.

- Type of Program: Candidates were selected from four types of training programs: CDA pilot, HSST, day care, and other. The CDA programs had the highest percentage of candidates judged competent and the lowest drop-out rates. However, when the dropouts were removed, the percentage of candidates judged competent in all program types was about the same.

- Regional Differences: Fifty-five percent of the sampled candidates were located in one region. There was a greater percentage of candidates judged incompetent in this region which was caused by the high drop-out rate. When dropouts were removed, the percentage of candidates judged competent were about the same.

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- Competent and Not Competent Comparisons: Comparisons were made between candidates judged to be competent and not competent. Specifically, years of programmatic experience with three to five year old children and years of formal education were compared.

  The results showed that the more experienced candidate was more often judged competent. Twenty-two per cent of the candidates who were judged as not being competent had from six to nineteen years of experience. When the formal amount of education was evaluated, it showed that the more formal education a candidate had the greater were the chances of being judged competent. Seventy-five of the seventy-seven candidates who were judged competent had at least an Associate of Arts degree.

Most experienced candidates judged most competent

Local Assessment Team Members Roles

The results of the analysis of team member roles and operations compiled by a nine member group of social psychologists were:

CDA Rep. effectiveness

- The CDA Representative was rated effective 78 percent of the time, while the other members were rated considerably less effective.

- Orientation Meeting of the LAT showed that the CDA Representatives were the group leader by consensus, and the other members followed. At the Decision Meeting the candidate and trainer took much more active roles.

- The effectiveness rating of the candidates, trainers, and child advocate increased sharply during the decision meeting in comparison with the orientation meeting.

Consortium Representative

It was determined that the Consortium Representative was:

- the most important team member
- instrumental to the promotion of group process
- generally successful with the groups; however there were problems with the group tasks and they didn't focus the process.

Trainer

Performance of the trainers varied with both successful and unsuccessful group participation in the process.

Candidate

The results about the candidate showed that:

Candidate's role

- 85 percent felt that candidate should be on the team;
- 90 percent believed that the candidate should vote on his own recommendation;
- A majority thought the team should vote in the presence of the candidates; and
- Team members approved of permitting the candidates to select their own team members.

Child Advocate

The role of the Child Advocate was the most troublesome in the field test.

The problems identified with being a Child Advocate were that the role required being: both a member of the community and one who defended the rights and welfare of children; able to understand the tasks and materials relating to early childhood and able to identify with group members as a peer. The results showed that the range of Child Advocates' professional experiences varied from trained professionals with advanced degrees to community members without high school diplomas. Language used in the assessment tended to be too difficult and technical. Finally, the lack of educational background produced team relationship rejection.

Parent's role

Portfolio

The purposes of the analyses were: to explore how the materials in the Portfolios were used to document the candidate's performance; to determine the best methods for demonstrating competence; and to determine if the methods differed as a function of research conditions.

Results were:

- The teams tended to produce fewer unsubstantiated Portfolios when the Representative was active.
- Observational data on a candidate's actual performance provided the most solid picture of competence. Visual data, as a whole, did not support the judgments. Audio recordings had little value since candidates did not include written introductions, nor did they describe how taped sessions demonstrated a particular competency. Photographs found in Portfolios tended to provide little support.

- Some Portfolios were essentailly incomplete. One-fourth examined contained no Profiles, or no information on the Profiles.

- The study produced <u>some</u> well-documented Portfolios which contained unambiguous evidence of a candidate's competence. Thus, the Portfolio was a workable concept — but guidelines for completing Portfolios must be explicitly stated.

FIELD STUDY 1975

INTRODUCTION

The 1975 field test was conducted at the request of the Consortium's Board of Directors. The Board directed that the complete assessment system be tested on a national sample of potential CDA Candidates. The Board wanted to get a preliminary analysis of the field-test data before deciding whether or not to begin to assess Candidates and award CDA credentials.

PURPOSE

The purpose of the field test was to provide the Consortium with information about how well the revised assessment process performed in the field. The method was to select 100 potential CDA Candidates, expose them to a complete assessment, and describe what happened. In this sense, the study was more a process of evaluation than systematic field research.

Process Evaluation

OBJECTIVES

The 1975 field study was designed to evaluate the Consortium's assessment system prior to full implementation with prospective candidates. Preliminary results of the field study were first presented to the CDA Board of Directors in March 1975. Additional questions posed at the March meeting broadened the scope of the evaluation. The following objectives, therefore, go beyond the original design of the 1975 field test and include related data gathered and analyzed to help improve and describe CDA's assessment system.

Evaluation of Assessment System

Three objectives and seven questions were used to structure the results of the 1975 field test. The objectives were:

Three Objectives

- To determine if the CDAC Assessment System was ready to be used for credentialing candidates.
- To investigate the validity of the CDAC organizing schema.
- To obtain follow-up information from participants about how well the CDAC assessment system worked in the 1975 field study.

METHOD AND PROCEDURE

Description of the Assessment Process as Tested

Consistent with the request of the Consortium's Board of Directors, the assessment process as tested included all elements needed for a fully operational assessment process.

LAT defined

In the field test, assessment was conducted by a team of persons called a Local Assessment Team (LAT). The team was structured to bring different points of view to the assessment; the LAT viewed the Candidate's performance from the perspective of a Trainer, that of a member of the community the Candidate serves, that of the Consortium, and that of the Candidate.

Assessment was performance-based. This means that the team evaluated the Candidate's performance with children, staff and parents. Performance, rather than coursework and credits, was involved in the assessment.

SAMPLE

The study employed 91 Candidates selected at random from the 534 trainees registered in the thirteen Child Development Associate National Pilot Training Projects. Candidates were selected at random in order to obtain a representative sample. *Candidate Selection*

The sample included: 31% white, 24% black, 12% Chicano, 9% Puerto Rican, 13% first Americans and 11% Asian Americans and Pacific Islanders.

HIGHLIGHTS OF THE FINDINGS

There were three objectives, seven questions and eight evaluation assumptions used to analyze the results of the 1975 field test.

Objective one: To determine if the CDAC assessment system was ready to be used for credentialing candidates.

Question: Is the assessment process workable?

The responses indicated that LAT members perceived that they followed the six steps. Members of the team reported following the process eighty-two to one hundred percent of the time. *Followed Process*

The evaluation assumptions that the LAT members followed the process and there was a sense of peership among the LAT members was supported.

Question two: Is the process credible?

LAT members were asked to rate how certain they were regarding their judgments about the candidate.

Eighty percent of team members indicated that they were either "certain" or "reasonably sure" of their judgments.

Trust Their Own Child

When the LAT members were asked to indicate whether each would trust their own child to the care of the candidate, eighty-five percent of the team members responded that they would.

The evaluation assumption that the team members were certain about their judgment of the candidate's performance was supported.

Certainty of Judgment

Results: Local Assessment Teams were asked to review each candidate's performance in 13 Functional Areas, and then to make an overall judgment. LAT members were asked to indicate how certain they were of their judgments. The analysis was designed to determine whether, at one extreme, there was a single dimension of judgment or, at the other, 13 separate dimensions. In short, did team members look at each Functional Area from a global point of view; from a specific point of view or some combination of the functional areas.

For the analysis, belief-strength was measured on an 8-point scale ranging from (1) Certain the candidate needs more training, to eight (8) Certain the candidate is competent.

There was a restricted mean range of scores (6.03 - 7.39) for the certainty of judgment rating.

Results of the factor analysis indicated that Four Factors were used in the certainty of judgment rating. They were:

- Factor I CHILD RELATED FUNCTIONS

Creative, language, individual strength cognitive, self-concept, and social functional areas loaded on this factor.

Factors Defined

- Factor II PHYSICAL/ENVIRONMENT

Physical and environment functional areas loaded on this factor.

- Factor III SAFETY

Safe, health, group management, social and self-concept functional areas loaded along with the global judgment.

- Factor IV HOME/STAFF

Home center and staff loaded on this factor.

There wasn't an overall general basis that was used to judge candidate performance. Four distinct factors were involved with the first factor accounting for the greatest amount of explained variance.

Evaluation Assumption Rejected

The evaluation assumption was rejected. The LAT members did not use an overall general basis to judge candidate performance.

Question three: Did the Assessment Process Differentiate?

Results: Fifty percent of the candidates were judged competent by LATs in all the Functional Areas, while

85 percent were judged competent in at least nine of the thirteen Functional Areas. Eighty-five percent of the candidates were judged competent.

Cognitive Area Needs

Within each of the Functional Areas, there was a greater tendency for LATs to vote candidates as needing more training. For example, 26 candidates were found to need more training in the Cognitive area; 21 in the Creative area. Only three were found to need more training in the Safe Functional area.

The results indicated that the distribution of competence was skewed. There was a high percent (85%) of judgments of "competent candidates". However, it appears that this was a result of uncontrollable factors which may have confounded the result. These factors deal with the apparently intensified preparation, high level of experience of the sample, and selection factors.

Evaluation Assumption Supported

The evaluation assumption was supported in a limited way. There was a range of Incompetent or Needs more Training of Candidate performance judged by LAT members. The overall successful rating of competence suggests that the candidates were prepared and motivated to be judged competent.

Question four: Were there side effects?

Results: Parents. For most Parent-Community Representatives, LAT participation was primarily a learning experience. Parents learned new things about child development and about their own children.

Results: Trainers. For the Trainers of CDA Candidates, participation in the LAT seemed to have two kinds of side effects. It focused their contacts with trainees on specifics -- the Functional Areas, and gave them an opportunity to assess their training programs.

Results: Candidates. The side effects of the assessment process on candidates came from several sources; compilation of the Portfolio; feedback from the LAT meeting; and a reinforcement of their professional role and awareness. In developing their Portfolios, candidates became more aware of their own knowledge and better able to organize it. LAT feedback led one candidate to implement a woodworking program, with the help of someone from the community, focusing on large and small muscle control. For another candidate, the LAT meeting discussion prompted fire drills and parent-teacher conferences. Another indicated she was teaching her children to use blunt scissors as a result of the LAT assessment. Assessment also stimulated an increased sense of self-worth and professionalism in some candidates. The positive feedback which one candidate got for her work in language prompted her to explain her approach to other members of the center's staff and to help them in their language activites. In another case, the LAT pointed out some positive behavior of which the candidate, herself, had been unaware. And one candidate remarked that she was, "more pleased with the center."

Portfolio Benefits

The evaluation assumption was supported. There were more positive effects than negative among the LAT members.

Evaluation Assumption Supported

Objective two: To investigate the validity of the CDAC organizing schema.

Question five: Does the CDAC Organizing Schema, which consists of six competency and thirteen functional areas, have factorial validity.

Results: The results of the factor analysis on the functional areas ranking of importance produced four factors. They were:

- Personal/Social
- Safety
- Intellectual
- Home/Staff

Congruence Projected

CDA's Organizing Schema which is used throughout the credentialing process consists of six competency areas. The thirteen functional areas have been judged and placed within each of the six areas. The evaluation assumption for this analysis projected that there would be congruence between the six areas and the results of the factor analysis.

There is a good match between the first competency area and the safety factor. The physical functional area was the only incongruent area which loaded on the factor when the first competency area was analyzed. It was concluded that there was congruency between competency area one and the factor structure labeled Safety.

Some Congruence Achieved

The second competency area is concerned with advancing physical and intellectual competence. The factor structure labeled Intellectual has three of the four functional areas loaded on this factor. Physical did not load on this factor. Cognitive, Language and Creative did load on this factor and provided for congruence with CDA's Organizing Schema. It should be pointed out, however, that the Creative Functional area did split and loaded on the personal/social factor.

Competency area Two was congruent with the factor structure labeled Intellectual. A restatement of the physical functional area and a review of the creative area would help improve the amount of congruence between the factor structure and the Organizing Schema.

Competency area Three relates to the development of positive self-concept and individual strength of the child. The factor defined as Personal/Social included both of these functional areas. In addition, it included the two function areas grouped into competency area Four. The fourth competency area is concerned with promoting positive functionaling of children and adults in groups. Competency area Three focuses on the individual personal development and area Four focuses on the social development. These two areas were grouped on the same factor which was labeled Personal/Social. All of the functional areas included in competency areas Three and Four loaded on this factor.

Personal Social Factor

It would be difficult to conclude that there was congruence between the factor structure and the two competency areas. There was enough similarity between the components in the organizing schema and the factor structures to begin to refine the definition of the functional areas or reconsider the classification system by the early childhood consultants.

The fifth and sixth competency areas produced a similar dilemma to the third and fourth areas. The fifth competency area is concerned with bringing about optimal coordination of home and center child rearing practices and expectations. The sixth area focuses on carrying out supplementary responsibility related to children's programs. Both of these competency areas loaded on the factor labeled Home/Staff. It appears that there is not any clarity and there is a lack of value concerning these two competency areas. The functional areas were ranked the lowest and there were few areas that correlated with these two areas.

Home/Staff Factor

Similar to the previous conclusion concerning congruence between CDA's Organizing Schema and the factor structure, there is a need to refine the definitions of the functional areas or reconsider the

classification system. An additional problem is reflected in these two areas, however, in that both the Staff and Home Center competency areas appear to be valued less than the other competency areas that are more directly related to the child. This may be appropriate and there always has to be a last rank area. However, the fact that both of these areas were ranked low should be noted.

Value of Staff/Home

The evaluation assumption that the CDA's six competency and thirteen functional areas will have factorial validity was partially supported. There was factorial validity for two of the six areas and the remaining four grouped in a manner which tended to support the CDA Organizing Schema. The use of only one measure for the ranking of importance restricted the investigation. Additional measures and revision of some of the operating definitions for the functional areas should help improve the results.

One Measure Restriction

It can be concluded that CDA's Organizing Schema is very good and that it does have an impressive amount of Construct Validity.

Question six: Is there consistency of judgment by team members about the thirteen functional areas which make up the organizing schema?

Two analyses were accomplished to investigate the evaluation assumption. The first part of the assumption, "LAT members will be consistently ranked for the three measures" was not supported.

The Intellectual Factor produced the highest frequency of judgment that there was a need for more training. It also had a high value rating of its functional areas and the least amount of certainty of judgment. This pattern continued in the Personal/Social factor, three of the six functional areas had

Intellectual Factor Needs

the same amount of inconsistency. There tended to be more stability in the Home/Staff factor; however, this may be attributed to the low ranking of importance that these functional areas were accorded. The Safety Factor provided the greatest stability and support for the evaluation assumption.

Inconsistent Rankings

It was concluded that the LAT members' ranking of the functional areas was not consistent. The four functional areas that needed the greatest attention were: Cognitive, Creative, Language and Individual Strength. These areas were ranked high on importance, the lowest on certainty of judgment and the areas for which the greatest amount of training was needed.

Evaluation Assumption Not Supported

The second part of the evaluation assumption that "the rank order rating will not vary among LAT members" was not supported. Chi Square tests were performed on each functional area for certainty of judgment, and importantce in decision making. In both cases the rating on each of the functional areas for all LAT members was placed in rank order and a median was computed. Each LAT member was then assigned to one of two categories (above or below the median) and a Chi Square test was performed for each functional area.

The Intellectual Factor on the importance had one area where there was a statistical difference. It was in the Cognitive area. The difference was caused by the trainer's high importance rating and the candidate's low ratings.

CDA Rep. Rankings

The Personal/Social Factor had two functional areas, Social and Group Management that were statistically different. In the Social Functional area, the CDA Representative and the trainer were below the median, while the candidate and parent were above the median in their rankings. Group Management

on the other hand found the candidate and trainer above the median and the CDA Representative and the parent below the median. It appeared that rule setting and the establishment of routine were more important to the worker than to the observers of the work.

No differences In home/staff

There were no differences in the Home/Staff factors. The safety factor had one statistical difference in the Safe functional area. The difference in rating was between the trainer and CDA Representative, who were above the median and the candidate and parent, who were below the median.

Four Areas of Statistical Difference

In summary, the statistical difference in four functional areas, Safe, Cognitive, Social, and Group Management with the divergent rating of the LAT members led to the conclusion that the evaluation assumption for importance could not be supported.

There were nine functional areas for which there was a significant difference — one in the Intellectual Factor, three in the Home/Staff Factor, and four in the Safety Factor.

CDA Reps Less Certain

The CDA Representative tended to be less certain than the other three team members on the Creative, Social, Home Center, Staff, Safe, Environment, and Physical functional areas where there was a statistical difference. In areas where there was no significant difference, the Cognitive and Language areas, the CDA Representative was below the median.

All nine of the thirteen areas where there was statistical significance can be attributed to the CDA Representatives' tendency not to be certain about their rating. This information and the previously reported results on the Importance and Needs More Training ranking led to the conclusion that the evaluation assumption could not be supported.

Question Seven: Does the 1975 field study participant's evaluation of the CDAC Assessment System indicate that it is ready for use in the Credentialing Process?

Results

Highlights from each of the questionnaires have been included to provide insight into the questions and the different group's responses.

LAT Questionnaire

There were 264 team members who responded to this questionnaire. The highlights were:

- 87% indicated their team took the time to discuss the role of each LAT member — *Process Followed*
- 82% discussed how the information was collected
- 27 indicated there was not enough time allowed to discuss information
- 92% discussed meeting operations
- 91% used the performance standards as they were designed

Parent/Community Representative Questionnaire

Fifty-two (57%) of the 92 parents responded. Their response to selected items on the questionnaire was as follows:

- 96% felt the Parent/Community Representative Handbook was useful — *Useful Handbook*

- 100% indicated the materials were easy to understand

- 92% felt the letter to parents and the observation forms were easy to understand

- 82% felt the parent representative could do a better job with one training session

When asked "What should training be concentrated on?", the parents identified the following areas:

Parents' Training Needs

- Observation of the candidate (79%)
- Interviewing parents (62%)
- The thirteen functional areas (90%)
- The LAT meetings (76%)

Finally, 98% of the parents felt that the parent questionnaire was a good way to express their views and 56% of the parents felt that the one hour observation of the candidate was not long enough.

Candidate Questionnaire

Seventy (77%) of the candidates surveyed responded to the questionnaire. Selected results from the questionnaire not already treated in other areas of the report were as follows:

100% Agree on Portfolio

- 100% felt the experience of making a Portfolio was valuable and 96% indicated that it helped them to prepare for the LAT meeting
- 34% felt that at some time in the process, they wanted to withdraw from the assessment

- 99% felt that participating in the LAT meeting was valuable
- 94% indicated that they had used what they learned from the process

Trainer Questionnaire

Trainers View of Needs

Forty-six trainers were surveyed and thirty-seven (81%) responded. Their response to the process and the identification of areas which worked well and areas which needed revision was as follows:

- The Portfolio guidelines and the CDAC Representative information worked well
- The Parent Questionnaire and the Trainer's report needed revision

Staff Report to the CDA Board of Directors

Report to CDA Board

The results of the follow-up questionnaire and staff recommendation were reported to the CDA Board of Directors in March 1975. The primary conclusion reported to the CDA Board of Directors was that the system was credible, workable and had desirable side-effects. In addition, information collected in this study was used in refining both the assessment process and the assessment materials. The results have been used to continue to conceptualize what happens to people who participate in the assessment process (side-effects).

The Evaluation Assumption was supported. The follow-up questionnaire provided information for the CDA Board of Directors to move ahead with the Credentialing System.

The data collected from the follow-up questionnaire and the results of the First and Second Field Test supported the CDA Board's decision to award the Credential.

CONCLUSIONS

The three objectives, seven questions and eight evaluation assumptions were used to frame the conclusions and recommendations for the 1975 field test data. The following are the conclusions for each objective area.

Objective One

Objective one: To determine if the CDAC Assessment System was ready to be used for credentialing candidates.

The answers to the four questions posed to meet this objective revealed that:

- LAT members followed the process and there was a sense of peership among the LAT members. This led to the conclusion that the assessment process was workable.

Members Certainty of Judgment

- Members were certain about their judgments of the candidates' performance and they used at least four distinct factors in their decision making about the candidate. A conclusion that the process was credible based on the fact that the functional areas were being used as intended and there was confidence among the team members about their decision making.

- The field test results were inconclusive about the ability of the LAT members to discriminate between competent and incompetent candidate performance.

The design of the field test and the restricted focus on the LAT meeting as the basis for judging competence prevented clearer findings about the question of differentiation.

Positive Side Effects

- There were more positive side effects than negative effects on the LAT members. The assessment system does have many qualitative dimensions, particularly for the candidate and parents.

Objective two: To investigate the validity of the CDAC Organizing Schema. This objective required two types of statistical analysis to help investigate the validity of the thirteen functional areas and the consistency of judgment by team members. The validity and consistency studies of the field test date were:

Validity of Organizing Schema

- Validity. The results of the factor analysis on the rank order rating importance was partially supported with two of the six competency areas factoring out completely and the remaining four grouped on the remaining two factors in a manner which tended to support the CDAC organizing schema. It was concluded that the CDAC organizing schema has an impressive amount of construct validity as demonstrated in the factor structure of the rank order of rating of importance for each functional area.

Functional Areas Needing Attention

- Consistency. The idea that the LAT members will consistently rank the functional areas was not supported. The analyses accomplished demonstrated that there was variability among the functional areas and within the computed factors. The functional areas which require the most attention, given their high rating of importance and low on certainty, were: Cognitive, Creative, Language and Individual Strength.

The certainty of judgment rating by the team had the CDA Representative generally less certain than the other three members of the team. In all the functional areas where there was a difference among members' certainty of judgment, it was the CDA Representative's lack of certainty which contributed to the difference.

Objective three: To obtain follow-up information from participants about how well the CDAC Assessment System worked in the 1975 field study.

Verified Field Test Results

The objective was a product of the need to follow up and verify the results of the field test. The LAT members who participated in the field study were mailed a questionnaire. Findings from the follow-up questionnaire were used along with other field test data to move the credentialing system into its first year of operation. The results of the questionnaire supported the decision to proceed. Respondents tended to be positive with the primary conclusion that the CDAC Assessment System was credible, workable and had desirable effects.

RECOMMENDATIONS

The field test produced a series of recommendations. The consortium should:

1. collect information which may be used to verify that the teams are following the required process.

Monitor LAT Voting Patterns

2. monitor LAT voting patterns and analyze team decision data to determine if one team member is consistently outvoted.

3. extend the right of appeal to all team members and collect information which will indicate the effect an appeal mechanism has on the assessment process.

4. continue efforts to improve the quality of documentation and to collect data on documentation which admits of public review.

5. develop a more detailed theoretical description of cultural adaptation and investigate the functioning of LATs to determine whether it is, in fact, occurring.

6. conduct research on those variables which might explain the high success rate of candidates for the CDA credential.

Determine Success Rate

7. monitor and analyze LATs according to the ethnic classification of candidates to identify a racial classification in its assessments.

8. incorporate the beneficial side effects of the assessment process into the system.

9. continue to design and evaluate studies which test the construct validity of the competency and functional areas.

EVALUATION OF THE CDA CREDENTIALING AWARD SYSTEM'S FIRST YEAR OF OPERATION

INTRODUCTION

Operational Stage

The Child Development Associate Consortium's Board of Directors' decision to implement the CDA Credential Award System signaled the end of the developmental stage of the assessment system and the beginning of the operational stage. The consortium's organizational development evolved to a point during 1975–76 when an evaluation of the effects of the CDA Credential Award System was appropriate.

Purpose of Evaluation

The purpose of the evaluation of the CDA Credentialing Award System's first year of operation was to determine how well the system was working and identify areas where there was a need for revision. The first and second field tests helped to mold and structure the phases of the Credentialing Award System.

OBJECTIVES

Four Objectives

There were four objectives, seven questions and ten evaluation assumptions used to structure the evaluation. The objectives and related questions for the evaluation of CDA's Credentialing Award System's first year of operation were:

- To evaluate how successful enrollees in the CDA Award System were at achieving a credential.

- To determine how well the CDA Award System and LAT meetings worked.

- To investigate the validity and reliability of the CDA Award System's six competencies and thirteen functional areas.

- To investigate areas which would enhance the CDA Credentialing System.

SAMPLE

The sample selected to participate in the evaluation of CDA's credentialing system was drawn from the credentialed candidate list as of June 25, 1976. A list of the one hundred most recently credentialed candidates who had unique teams was compiled. This list included candidates who were credentialed between March and June 1976. It was from this master list that a sample of 51 consortium representatives, 50 trainers, 50 P/C representatives and 50 credentialed candidates were contacted and interviewed. There were: 3% Asian, 30% black, 11% Mexican American, 4% first American, 48% white and 4% no information on background.

Credentialed Candidate with Unique Teams

HIGHLIGHTS OF THE FINDINGS

Objective one: to evaluate how successful enrollees in the CDA Award System were at achieving a credential.

Question one: How successful have enrollees been in achieving the Child Development Associate Credential?

Success Rate

Results: A total of 3,340 have enrolled in the CDA process. Five hundred sixty-one (561) have been credentialed and 456 are in the candidate stage with 2,333 in the enrollee status. CDAC has produced 17% credentialed candidates or successful enrollees. It is interesting to note, however, that once the enrollee proceeds to the LAT meeting the rate of success is over 99%. CDA process requirements provide

for self-initiation of assessment and, therefore, the CDA System permits individuals to include or exclude themselves from the process. The significantly large number of enrollees who do not proceed to the candidate stage is attributed to a variety of reasons. Follow-up mailings and telephoning of enrollees revealed the following: changed jobs, no place to be assessed, just interested in information about CDA, and changed mind after reviewing requirements.

Self-initiated Assessment

The evaluation assumption that at least fifty percent of the enrollees have been credentialed was rejected. Actually only eighteen percent have been credentialed since the inception of the credential.

Rejected Assumption

Objective two: to determine how well the CDA award system and LAT meetings worked.

Question one: In general, how is the CDA credentialing system viewed by successful candidates and the LAT members, parents, trainer and CDA representatives.

Results:

- By and large all the respondents were very enthusiastic and positive about the various items in the CDA and LAT procedures.

Positive Results

- The average ratings on the two most favorable items of the numerous four point scales combined exceeded 90% in most cases, in some cases they equalled 100% (i.e., very clear, excellent).

- If the most favorable item in the scales concerned with clarity, importance, excellence, etc. is used as a criterion, the CDA Reps were the most critical respondents, followed by the trainers, candidates and the parents. The CDA Reps rated 49% of the 75

items on the questionnaire below 50%, the trainers 23%, the candidates only 8% and the parents 1%. On average, 20% of the items did not achieve the 50% level in the most positive category for rating.

Activities within Steps of LAT

- The activities within the steps of the LAT meeting were the major source of confusion (4 out of 10 of them averaging below 50% on very clear) followed by the principles (25%), portfolio (17%), steps of the LAT meeting (14%) and items in the Credentialing System (13%). The other three areas each had less than 10% of their ratings below 50%.

- The CDA Reps were the only group asked to rate the sections in the Consortium Representative Procedures Manual. In keeping with their critical stance, 6 of the 10 steps received ratings below 50% for very clear.

- There was general agreement as to the most important competency area, "builds positive self concept and individual strength", ranging from 34% to 50%. The least important area was "carries out supplementary responsibilities related to children's programs" ranging from 32% to 50%.

Self-Concept Most Important

- The most important functional area in each of the groups was "self-concept" averaging 43%. The least important area was "staff," 16% to 28%.

- A substantial number of respondents used something in the decision making process other than the functional areas ranging from 62% of the trainers to 30% of the candidates.

Need for Structure

- The parents were the least enthusiastic about a need for more structure in the CDA Guidelines Handbook about what should be in the Portfolio (22%) vs. ratings of 54 to 65% for the other three groups.

- All four groups felt the candidate was the most important member of the LAT in the Credentialing System (65%, 56%, 44% and 44%). Respondents showed remarkable restraint in voting for themselves as the most important member of the LAT in this regard -- only 14% of the reps, 10% of the trainers, 12% of the parents and 44% of the candidates were the most important (this 44% does not appear to be self-aggrandizement).

Candidate Most Important

- With the exception of the Parents (who voted for the CDA Rep) each of the other groups thought they had the most influence on the final decision.

- If it were necessary to eliminate one role from the team, the Parent was the leading choice for all four groups (38% to 56%).

The evaluation assumption that the CDA credentialing system will be viewed positively by LAT members was accepted. There tends to be a general positive view expressed by the interviewed LAT members. Areas of concern were also identified and possible revision after further study appears to be appropriate. There doesn't appear to be a great need to change any of the basic concepts or approaches in the system.

Evaluation Assumption Accepted

Question two: How well is the CDA Credentialing Award System working?

CDAC representatives, credentialed candidates, trainers and P/C representatives were asked to evaluate their roles as described in the various manuals and handbook. They were posed questions about clarity and satisfaction with the way activities were described. In addition, two questions were asked about the clarity and the amount of problems encountered in completing the required forms. The following are highlights from the results.

Clarity Questions

CDAC Representative

- Manual

The ten sections of the manual all were rated very clear or clear by at least 90% of the CDAC Representatives. The CDAC Representatives' satisfaction rating of the ten sections of the manual tended to be lower than the clarity rating. Eight of the ten sections were rated very satisfied or satisfied by at least 90% of the CDAC Representatives while the Contact and Screening and IAT meeting sections of the manual received satisfactory or very satisfactory rating of 87% and 86% respectively.

Rating of Sections

- Forms

There are eight forms that the CDAC credentialing system uses that must be completed by the Consortium Representative. There was only one form that received less than 50 percent rating of very clear. It was the meeting profile form. This was the same form that had 45% of the CDAC representatives indicating that they had some problems with understanding the form.

Very Clear Rating

Candidate

- Handbook

The candidate's role in the credentialing award system is described in the CDA Handbook. There are twenty activities detailed in the Handbook and successful completion of each activity is required of all credentialed CDA's. At least 90 percent of the candidates responded that seventeen of the twenty activities were clear

20 Activities Rated

or very clear. The three activities which received less than ninety percent were:

- Beginning to collect information by developing your portfolio 78%
- Completing your Portfolio 86%
- Participating in LAT meetings .. 84%

Greatest Percentage of Unclear Ratings

These three areas also received the greatest percentage of unclear ratings with the LAT Meeting receiving 16 percent unclear, completing portfolio 14 percent and developing portfolio 12 percent. The only other activity that might be considered for further study is the mailing of the completed enrollment form to CDAC. It only received a 48 percent rating of very clear.

- Forms

There are eight forms that the CDA candidate must complete in the credentialing process. Candidates were requested to rate the clarity of the forms and how well the form was understood. There was only one form which received less than 90% rating of clear or very clear. It was the guidelines for developing the portfolio. Fourteen percent (14%) rated the guidelines as unclear.

Trainer

- Handbook

Three of Nine Below 90%

The trainer role in the CDA credentialing award system involves nine activities according to the Handbook. Clarity and satisfaction ratings were made by interviewed trainer. Three of the nine activities received a rating of less than at least 90 percent clear or very clear. The three activities were: preparing for the LAT Meeting (86%); participating in the LAT Meeting (84%); and, returning profile and other assessment materials to the consortium.

Preparing for the LAT Meeting was rated the most unclear activity (14%) followed by returning profile and other assessment materials (12%) and participating in the LAT Meeting (10%). The same three activities received the lowest satisfaction rating.

- Forms

Six forms are completed by the trainers in the CDA Credentialing process. Trainers were asked to rate the clarity and their understanding of the forms. All six of the forms were rated very clear or clear by at least 94 percent of the trainers. Their rating on the amount of problems they had understanding the forms revealed that there were at least some problems with the trainer's report on the candidate (18%) and the competency standard form (12%). The other forms all were rated by at least 90 percent of the trainers as having no problem understanding the forms.

Some Problems With Forms

P/C Representative

- Handbook

P/C representatives are involved in eleven activities as defined in the CDA Handbook. Their rating on the clarity and satisfaction of the activities were exceptionally high. The lowest rating was 92 percent with two areas rated 100% clear or very clear. There were similar results about the parent satisfaction with the way the activities worked in the process with four activities being rated very satisfied or satisfied by 100% of the parents interviewed.

100% Clear/Very Clear

- Forms

The eight forms that the parents completed in the process were rated on clarity, and understanding. All eight forms received exceptionally high ratings on clarity with all forms receiving at least 96 percent clear or very clear rating. The lowest rating was

on the parent questionnaire which had two percent of the parents indicating that the parent questionnaire was very unclear. The parents tended to have some or many problems with five of the eight forms. They were:

Parents Problems With Forms

- CDA Application Form 18%
- Parent Questionnaire 32%
- Master Questionnaire 26%
- Parent Observation Form..... 26%
- Competency Standards 20%

LAT Members: Rating of Portfolios

There were twelve questions asked of LAT members about the portfolio. Six of the questions about the portfolio related to how useful the portfolio was in the credentialing process. The results were:

CDA Rep Ratings

- The CDAC representatives tend to rate the usefulness of the portfolio lower than all other team members for five of the six areas.
- There is a statistical difference among team members for three of the six areas which can be attributed primarily to the CDAC representative exclusively in two of the areas and partially along with the trainers in the other area.
- There are no ratings below 78 percent and the mode for all roles in the six areas was 96%.

Trainers Report

The trainers report on the candidate is one of the important elements in the LAT process. The LAT members rating of importance of the trainer report showed that:

- 98% of the candiates, 100% of the P/C representatives and trainers thought the trainer's report was important or very important.

Importance of Trainer's Report

- 91% of the CDAC Representatives thought the report was important or very important with only 59% of the CDAC representatives indicating that it was very important.

Parent Opinion Questionnaire

The P/C representative performs a parent opinion summary about the candidate. The questionnaire is sent to the parents of the children in the program when the candidate is working. LAT members were asked to rate the importance of the parent opinion questionnaire. The results of the rating were:

Importance of Parent Questionnaire

- Over 60% of all the team members in each role rated the questionnaire as very important.

- 98% of the candiates, and 96% of the CDAC representatives and P/C representatives rated the questionnaire as very important or important.

- 10% of the trainers rated the questionnaire as unimportant or very unimportant.

The evaluation assumption that the candidate, trainer, parent and consortium representative will rate:

Evaluation Assumptions

1. their role as clear, appropriate and working well was accepted.

2. the forms they must complete in the process as clear and indicate that there were no problems in completing the forms was partially accepted. There were problems with the candiate's portfolio activities and forms and the P/C representative's parent questionnaire. In general all

forms were rated clear and LAT members did not encounter problems in completing them.

3. the portfolio as useful, important and beneficial in the LAT process in the LAT meeting and to the candidate was accepted.

4. the trainers report and parent's questionnaire as important to the credentialing system was accepted.

Objective three: to investigate the validity and reliability of the CDA Award System's six competencies and thirteen functional areas.

Objective Three Validity

Question one: To what degree does the CDA credentialing system have construct validity?

Results

Three factorial studies were accomplished to evaluate the CDAC competency areas' construct validity. The first analysis was designed to evaluate the rating patterns of fifty-one LAT members on the preform. The preform requires that the team members rate the candidate on the thirteen functional areas and on the final decision. A six point scale was used to rate the candidate, with zero equaling needs more information, and a score of five representing an excellent for the competency rating.

Preforms

Pre-Form Factor Analysis

The functional areas factored into three underlining factors with the final decision splitting on the first and third factor. An analysis of the distribution of factor loadings among factors suggested that the factors should be called: Safety, Intellectual/Social, and Home/Staff.

Three Factors

Safety Factor

The Safety Factor was the second factor and it accounted for nine percent of the variance. It

had unique loadings for the Safe, Healthy, Environment functional areas, while Physical and Group Management split on the first factor. The functional area ratings by the LAT members tended to support the ranking of importance factor structure in the 1975 Field Test. The first four functional areas loaded together on the ranking of importance rating during the 1975 Field Test and the LAT members, in the use of the pre-form, tended to use the functional areas in a similar manner as they rated the candidate.

Similar Finding in 1975

Intellectual/Social Factor

This factor had all the functional areas that related directly to the child's development. All the loadings were moderate to high and the factor structure accounted for eighty-four percent of the variance. The final decision vote also loaded on this factor; however, it split on the third factor.

Child's Development Factor

All of the functional areas on this factor related to the child's development; however, there wasn't any discrimination among the intellectual type areas and the Self-Concept type areas. In the Field Test results this distinction was made in the ranking of importance. The pre-form ratings do not appear to involve this type of discrimination.

Staff/Home Factor

A third factor accounted for eight percent of the variance, with four functional areas loading on the factors; Creative, Home Center, Staff and Final Decision were the areas that loaded on this factor. The relatively high loading of Home Center and Staff were similar to the ranking of importance in the 1975 Field Test. The split loading of the Final Decision on this factor suggests that there were two factors underlining the decision making by the LAT members. This decision making process, although different from the ranking of importance in the Field Test, does appear to have some validity.

Four Functional Areas Loading

In summary, the three factor structures for the pre-form tended to replicate the findings of the Second Field Test. The functional areas did group

logically, even though they did not produce an identity image of the Six Competency Areas. There was, however, a pattern of factor structure which supported the construct. It does appear that the LAT members are synthesizing the functional areas into three factors, as they make decisions about the candidate. The splitting of the final decisions on two of the three factors suggests that only two factors may be at work in the decision making about candidate competency . . . namely, Intellectual/Social and Staff/Home.

Synthesized Functional Areas

The evaluation assumption that the pre-form voting record of LAT members will demonstrate that the CDA Credentialing System has factorial validity was accepted partially. There was some congruence between the factor structure of the pre-form and the six competency areas. The three factor structure was partially caused by the limited number of rating for each functional area. Another possible reason for the variance between the field test results on Rating of Importance can be attributed to the difference between what is said to be valued (ideal) and the way ratings occur in an evaluation setting. Specifically, people may say they value many things. However, when required to perform, the underlying structure of decision making is reduced to a minimum of factors for making decisions.

Congruence With Competency Areas

Voting Form Factor Analysis

Factor one included four of the six competency areas with none splitting on the second factor. Self Concept/Individual Strength, Children and Adults in Groups, Home Center and Supplementary Children's Programs competency areas loading on this factor, along with the final decision.

Loading of Final Decision

Factor two included Safe/Healthy and Physical/Intellectual Competence. Two of the functional areas from the second competency area split on to the first factor. They were, Physical and Creative. With this exception, the six competency areas maintained their internal structure on the two factors.

Two Factors

The results of the Factor Analysis suggest

that the LAT members' rating further synthesized the six competency areas from the three factor structure that evolved from the preform to a two factor structure on the voting form. Simply stated, two things seem to be involved in the decision making of a candidate's competency. First, there are the six functional areas which have been grouped into the first and second competency categories and second, there are the seven functional areas which have been categorized in the remaining four competency areas.

Decision-Making About Competency

This two dimension decision making process appears to take the form of tangible (necessary condition for success) and intangibles (sufficient conditions for success). The Tangible factor, which consists of Safe, Healthy, Environment, Physical, Cognitive, Language, and Creative function areas, provides for all the necessary conditions which must be included in the repertoire of candidate's behavior in caring for the child. The Intangible factor consists of the remaining seven functional areas, final decision and sequence of the physical and creative functional areas, which split on this factor. This Intangible factor provides for the highly valued Self-Concept functional area and the lowly rated social area (which LAT members did not want to eliminate). The exclusive loading of the final decision on this Intangible factor suggests that the various functional areas which load on this factor provided enough degrees of freedom for decision making among the diverse LAT members. Furthermore, the factor structure's internal consistency among competency areas suggests that it may be possible with the development of additional items of judgment for the team to evolve a six competency area factor structure.

Two Dimension Decision-Making

Intangible and Tangible Factprs

In summary, factorial validity of the CDA Consortium competency areas was demonstrated in a limited manner. The two factor structure of the Tangibles and Intangibles provided the basis for the LAT members decision making. Tangibles appeared to serve as a basis to review the necessary conditions required for a judgment of a candidate's competency, while the Intangibles provided the sufficient condition for a judgment of a competent candidate.

Necessary and Sufficient Conditions

Factor Analysis of the Competency and Functional Areas' Rating of Importance

Competency and Functional Areas

LAT members interviewed during the evaluation of the operational stage were asked to rate the importance of the six competency and thirteen functional areas. A scale of one to four was used, with one representing Very Unimportant and four being Very Important. There were four factors which accounted for 100 percent of the variance. The nineteen variables analyzed were similar to the analysis performed on the rank order of importance rating accomplished in the 1975 Field Test. The difference between the two analyses was: the addition of the rating on the six competency areas; and, the scale used to perform the rating. The additional competency areas, however, did produce a somewhat different factor structure. There is a strong tendency for the competency and functional areas to remain internally consistent even though they are rated in a similar manner. Variations of scale length and additional items for rating the functional areas should provide a clearer picture of the CDAC's organizing schema used in the assessment.

First Factor

The first factor accounted for sixty-three percent of the variance. None of the six competency areas loaded on this factor. Two categories of the competency area were included on this factor without any splitting on any other factor. All the functional areas included in Physical/Intellectual and Social/Individual strength loaded on this factor. In addition, the environment functional area loaded on this factor and social split on this and the third factor. It is interesting to note that all the functional areas on this factor related directly to the early childhood program activities.

Second Factor

The second factor accounted for eighteen percent of the variance. Four of the six competency areas loaded on this factor. They were: Safe/Healthy, Physical/Intellectual, Self-Concept/Individual Strength, and Child/Adult Groups. Not one of the functional areas loaded on this factor and there was not any splitting of loadings. This was a pure

competency area factor.

The third factor which accounted for twelve percent of the variance was the most interesting in the structure. It was the only factor structure which had loading from both the competency areas and functional areas consistent with the CDAC organizing schema. The Home Center and Supplementary Program competency areas loaded on this factor as did the Home Center and Staff functional areas. Each one of these functional areas makes up the competency area in the organizing schema. The other functional areas which loaded on this factor were Group Management and Social. Social split on factor one, although it had a stronger loading on this factor. Competency area four, Children/Adult Group, is used to categorize these two functional areas.

Third Factor

The fourth factor accounted for seven percent of the variance and it had two functional areas loading on it. Functional areas, Safe and Healthy, which are categorized in the first competency area, loaded on this factor. There was no splitting of loading, and no other area loaded on the factor.

Fourth Factor

In summary, it can be concluded that there was some consistency between the factor structure and the CDAC organizing schema. The factor structure did not develop as pure when the six competency areas and the thirteen functional areas were used as a standard. There was one factor structure which began to develop this type of structure. The other functional areas maintained a logical grouping consistent with the CDAC schema; however, there was not enough variation in the judgment to produce a more ideal factor structure.

Logical Grouping of Areas

The four factors tended to maintain logical groupings of the functional areas which were internally consistent with the CDAC organizing schema. It may be concluded that there was some construct validity and that the CDAC organizing schema can serve as an excellent model for further evaluation to establish the validity of the CDAC Credential Award System.

Construct Validity

The evaluation assumptions that:

Evaluation Assumptions

- The pre-form voting record of LAT team members will demonstrate that the CDA Credentialing system has factorial validity was partially accepted.
- The voting form record of LAT members will demonstrate that the CDA Credentialing System has factorial validity was partially accepted.
- LAT members interviewed on the thirteen functional areas order of importance, consistent with the CDA's six competency areas, was partially accepted.

Question two: Are the LAT members' voting patterns on the pre-form and voting form reliable?

Reliability

Results: The second more important characteristic of a measuring device in the behavioral sciences is reliability. Reliability, or consistency, is central to any sound evaluation. The CDAC uses LAT members to make judgments about the competency of the CDA's. In effect, the system has been designed in a manner which assumes that if the assesament were to be repeated with another set of LAT members, but with the same functional areas, the variance between the differences on mean ratings of the LAT members is part of the error of measurement, and does not represent any systematic source of variation. When this assumption is made, a method commonly used to estimate reliability is analysis of variance.

Adjustments for Frame of Reference

It is recognized, however, that mean ratings by individual LAT members represent a systematic frame of reference in the rating. When this occurs, the source of variation due to differences between these means should not be considered part of the error of measurement, and adjustment for the differences in the frame of reference (of LAT members) should be computed.

An analysis of variance to estimate reliability of team judgment and the related adjusted estimate of reliability was computed for fifty-one Local Assessment Teams. A total of 153 computed

and adjusted estimates of reliability were computed for the pre-form, voting form, and both combined.

Adjusted Reliability

The pattern of the adjusted reliability suggests that they be used as the basis for determining reliability. Furthermore, the scale (zero to five), for the Preform tended to distort the preform and combined estimates of reliability. Therefore, the analysis of the results focuses on the voting form. Both the preform and combined computations produced some respectable reliability; however, the voting form was used as the basis for the decision making in the determination about the CDA's competency.

25% of Reliabilities Excellent

Thirteen (25%) LAT reliabilities were rated excellent: three reliabilities in the .81 or above; and, ten in the .71 to .81 range. Fifteen (29%) were rated good, with nine in the .61 -.7 range, and six in the .51 -.6 range. Fair ratings were given to eight (16%) LAT's. Three were in the .41 - .5 range and five were in the .31 -.4 range. A total of fifteen (29%) received a poor rating.

It is interesting to note, that when an investigation of sampling the poor and fair LAT's ratings was accomplished, it showed:

Statistical Computation Problem

- there tended to be little or no variation in the way one or two members of the LAT rated the functional areas. Actually, what occurred was that an LAT member voted, using a 3 or 4 for all functional areas. This produced a problem in the statistical computation of reliability, even though there was consistency of judgment on the part of the LAT member.

- there wasn't any one member of the team that tended to vote a consistent pattern. In other words, the poor and fair reliabilities were as likely to be caused by the CDAC representatives, the trainer, the candidate and the parent.

In summary, there were 55% of the LAT estimates of reliability of judgment, which were good

or excellent (i.e, .51 to .89). Fifteen percent were fair (.31 -.5) and twenty-nine percent were poor (below .3). It was concluded that the reliability of LAT member's judgment was good.

Evaluation Assumption

The evaluation assumption that the voting patterns of the LAT members will be reliable for the voting form was accepted.

Objective four: to investigate areas which would enhance the CDA Credentialing System.

Question: Should the CDA Credential be enhanced by awarding academic credit for achieving the credential; structuring the portfolio further; and, requirint a written test before the LAT meeting?

Results

Academic Credit for CDA Credential

Most Negative About Academic Credit

The question concerning academic credit was asked of all LAT members. Ninety-two percent indicated that academic credit should be awarded for the credential. The CDAC Representatives were the most negative, followed by the parents. When the question was posed as to how many academic credit hours should be awarded there were as few as two and as many as ninety hours given as a response. The median number of credit hours for the total groups was eighteen credit hours and the mode was sixty credit hours. P/C Representatives median was nine credit hours with a mode of three. The CDAC Representatives had a median and a mode of fifteen while the trainer and candidate had the same median of thirty credit hours. The mode for the trainers was thirty credit hours while the candidates was sixty credit hours. Fourteen candidates responded with sixty credit hours and were joined by ten other LAT members.

Fourteen Candidates Want Sixty Credit Hours

In summary, with one exception of the parents at least fifty percent of the LAT members indicated that at least eighteen academic credit hours should be given for the credential. The most frequently

responded number of credits that should be awarded was sixty which was caused primarily by the candidate's response.

Structuring the Portfolio

The portfolio plays a very important role in the LAT process. As it was previously discussed in the evaluation of portfolio, it may be one of the reasons that unsuccessful candidates do not complete the assessments. Many recommendations have been made about the portfolio in the development of the CDAC assessment system. Central to the design work on the system was the concept of structure of the portfolio. Wher the question was asked of the LAT members about the need for more structure, the response was divided with 51% yes and 49% no. There was a statistical chisquare difference (.01 level) among the LAT members which may be attributed to the P/C representatives. Only 22% of the P/C representatives wanted more structure. 65% of the CDAC representatives, 54% of the candidates and 62% of the trainers indicated that there was a need for more structure. In response to the question should there be a list of things which should be included in the portfolio 68% said yes and 31% no. There was a chisquare statistical differemt (05 level) among the LAT members response. The trainers 5.8% and candidate 60% were lower in these positive responses than the CDAC representative 80% and P/C representatives 76%.

Need for More Structure

Chi Square Difference

In summary, three of the four LAT members see a need for more structure in the guidelines for the portfolio. The parents were the only members who did see the need. There was a concensus that a list of things to be included in the portfolio should be developed and included in the handbook.

Written Test Before the LAT Meeting

One of the recommendations that has been made about the CDA credential award system is that a written test should be given to the candidates before the LAT meeting. When this question was posed to the LAT members 51% disagreed or strongly disagreed

51% Disagreed

with the recommendation to administer a written test.

There was a chisquare statistical difference (.01 level) among the LAT members response to the written test question. 75% of the parents agreed or strongly agreed that a written test should be given before the LAT meeting. There were 42% of the CDAC Representatives, 40% of the candidates and 36% of the trainers who agreed with the parents response.

Parents Want Test

In summary, the recommendation about a written test before the LAT Meeting divided the LAT members with the parents tending to agree with the recommendation. The other LAT members were also divided; however, there was a tendency to disagree with the trainer being the most negative about the recommendation.

The evaluation assumption that:

- at least fifteen credit hours should be awarded for achieving a CDA credential was accepted.
- the CDA portfolio does not require more structure was rejected.
- a written test for the candidate is not necessary before the LAT meeting was accepted.

Evaluation Assumption

Conclusions and Recommendations

Conclusions

Four objectives, seven questions, and ten evaluation assumptions were used to organize the conclusions and recommendations. The following are the conclusions for each objective area.

Objectives

Objective one: To evaluate how successful enrollees in the CDA Award System were at achieving a credential.

One question was used to achieve this objective. The answer to the question was:

- 17% (561) enrollees have been credentialed, 14% (456) are in the candidate stage and 69% are in enrollee status. CDAC award system permits the enrollees to progress at their own rate. It is a type of individualization of assessment which is controlled by the enrollee. Once the enrollee moves through the application process into the assessment phase there is a high rate of success. Actually 99% of the candidates who have reached the assessment phase have been credentialed.

17% Credentialed

Objective two: to determine how well the CDA award system and LAT meetings works.

Answers to the three questions posed to meet this objective revealed that:

- There tends to be a general positive view expressed by the 201 interviewed LAT members. Areas of concern about the process were identified; however, further study prior to revision is what is required.

Positive Attitude

- The results do not indicate a need to change any of the basic concepts or approaches in the system.

- By and large all the respondents were very enthusiastic and positive about the various CDA and LAT procedures.

- The average ratings on the two most favorable items of the numerous four point scales continued exceeded 90% in most cases and in some cases they equaled 100% (i.e. very clear, excellent).

Most Favorable Response

- All groups felt the candidate was the most important member of the LAT in the credentialing system.

- If it were necessary to eliminate one role from the team the parent was the leading choice for all four groups (38% to 56%).

- The CDAC Representative, candidate, trainer, and P/C Representative viewed their role as clear, appropriate and working well. The forms they must complete in the process were rated as clear and they indicated that there were few problems in completing the forms. The area for which some problems were identified were one candidate's portfolio activities and forms and the P/C Representatives parent questionnaire.

Problems in Completing Forms

- The portfolio was viewed as useful, important and beneficial to the LAT process, the meeting and the candidate.

- The trainer report and the parent's questionnaire were viewed as important to the credentialing system.

- LAT meeting principles and steps were clear, appropriate and worked well. There were statistical differences among the LAT members rating of how the principles worked. The ratings were sufficiently high however to conclude that the six principles worked well.

LAT Meeting Principles

- LAT meeting activities were viewed as working well and using about the right amount of time.

- CDA's six competency and thirteen functional areas were rated as very clear and very important to the process by LAT members.

Objective three: to investigate the validity and reliability of the CDA Award System's six competencies and thirteen functional areas.

Validity and Reliability

Two questions were used to achieve this objective. Answers to the questions provided the following:

- Preform voting and voting forms record of LAT members demonstrated a degree of factorial validity.

- LAT members rated the thirteen functional areas order of importance in somewhat a consistent manner with the six competency areas which are used to categorize the functional areas.

Functional Areas Importance

- The results of the factorial studies suggest that there was some construct validity and the CDAC organizing schema can serve as an excellent model for further evaluations to establish the validity of the CDAC credential system.

- 55% of the local assessment team reliability of judgments were rated good or excellent, 15% were fair, and 29% poor. In general the reliability of the LAT members judgment was good. The voting pattern of LAT members was reliable for the voting form.

55% Reliabilities Good or Excellent

Objective four: to investigate areas which would enhance the CDA Credentialing System. One question was used to achieve this objective. The answer revealed that:

- LAT members felt that at least fifteen academic credit hours should be awarded for achieving a CDA credential.

- The portfolio does require more structure in the handbook guidelines.

Structure of Portfolio

- A written test is not necessary before the LAT meeting. There was a split response among LAT members on this question with 51% disagreeing and 48% agreeing.

Recommendations

The evaluation of the CDA Credentialing Award System's first year of operating suggests the

following recommendations. The Child Development Associate Consortium should:

1. Continue to operate the CDA credentialing award system as it was designed and functioned during 1976-76.

2. Monitor the enrollee and applications files to insure active candidacy of all candidates.

CDA Should Operate

3. Develop a structured list of items which could be used in the portfolio and incorporate the list in the process.

4. Review all forms for clarity and data processing.

5. Increase the number of items to be rated by LAT members for each functional area to help increase the validity and reliability of the CDA assessment system.

CDA Should Increase

6. Obtain a common rating for CDAC Representative on a group of candidates. This rating should be used to develop a standard of judgment within LAT meetings and the computation of reliability coefficient.

7. Secure academic credit for the CDA credential.

CDA Should Secure

8. Explore the use of a written test designed to measure basic information about each of the thirteen functional areas.

9. Implement an on-going managerial evaluation system to adjust and continue to refine CDA's credentialing systems.